

*Outgoing
S/041/0042*

Peter Brinton <peterbrinton@utah.gov>

Willow Creek Salt Mine (S/041/0042) - bond amount required

1 message

Peter Brinton <peterbrinton@utah.gov>

Wed, Aug 31, 2016 at 10:07 AM

To: Jessie Nielsen <jnielsen@nas-co.net>

Cc: Penny Berry <PENNYBERRY@utah.gov>, Paul Baker <paulbaker@utah.gov>

Hi Jesse,

Paul and I spoke, and we decided that a bond amount of \$7,700 is appropriate for the Division to require as reclamation surety. Please see the attached and updated site-specific reclamation cost estimate, which is conservative based on your plans.

Penny has been in contact with the bank, and she was going to notify them that this is the required amount.

Let me know if you have questions or concerns. I'll get back to you later about the maps.

Peter

**Willow Creek Salt Bond.pdf**

71K

Willow Creek Salt Mine

8/31/2016

S/041/0042

Reclamation Cost Calculation & Bond Determination

Demo/Removal Costs		Notes
Removal of 40' storage container	\$ 1,000	Conservative estimate.
Total Demo/Removal Cost	\$ 1,000	Rounded up to nearest \$1000

Earthworking Costs		Notes
Equipment Type	CAT 320	Medium excavator on Rassmussen Excavation's (MA279) price sheet. A smaller excavator could do the work in a day at a lower cost per hour.
Production (yds/hr)	N/A	Estimate of time judged to be more appropriate / practical.
Operation Time (hrs)	30	Very conservative estimate based on a very minor amount of grading & cleanup. A salt outcrop - very little soil and very little vegetation.
Operation Cost (per hr)	\$ 125	State Cooperative Contract w/ Rasmussen Excavation, MA279
Total Earthwork Cost	\$ 3,750	Operation Cost (\$/hr) * Operation Time (hr)
Total Earthwork Cost	\$ 4,000	Rounded up to nearest \$1,000

Seed Costs		
Acres	5	Conservative assumption, since salvaged soil is very minor.
Application Rate (lb/acre)	11	See Redmond Minerals seed mix.
Seed Amount (lb)	55	
Average Cost (per lb)	\$ 5.50	Recent Division seed purchases ranged from \$3.54/lb to \$8.23/lb.
Labor Rate (\$/hr)	\$ 47.60	Estimated state employee labor rate.
Seeding Rate (acres/hr)	1.0	
Total Seed Cost	\$ 600	Rounded up to nearest \$100

Mob / Demob Cost		Notes
Distance - one way (miles)	7	Google Maps to site from Salina
Travel Time - one ways (hrs)	1.0	Google Maps to site from Salina
Travel Time - both ways (hrs)	2	Rounded up to nearest hour; Google Maps
Mobilization Cost per Hour	\$ 110	State Cooperative Contract with Rasmussen Excavation (MA279).
Total Mob / Demob Cost	\$ 220	Cost per hour (\$/hr) * Travel Time (hr)
Total Mob / Demob Cost	\$ 1,000	Rounded up to nearest \$1,000

Summary	Amount	Notes
Demo / Removal	\$ 1,000	Conservative, not including scrap value.
Earthwork	\$ 4,000	Assumed Rasmussen Excavation (MA279) cooperative contract and CAT 330 for @ \$125/hr. Very conservative time estimate. A smaller excavator is more suitable and less expensive than this.
Seeding	\$ 600	Division's assumed average cost per acre, which is conservative for size of disturbance of 0.1 acres.
Mobilization / Demobilization	\$ 1,000	Rasmussen Excavation's cost to mob/demob 72 miles (4 hrs).
Indirect and Other Costs	\$ 1,100	A round number & a conservative assumption (~19.6%). Covers fuel price increases, escalation factor (1.2%), other Division costs, etc.
Total Reclamation Cost	\$ 7,700	3rd party. Conservative. This is the recommended bond amount.